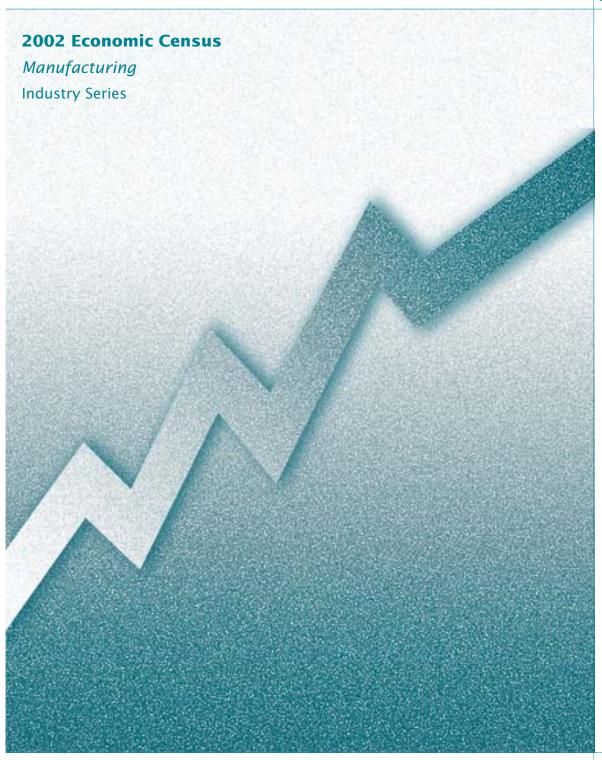
Carburetor, Piston, Piston Ring, and Valve Manufacturing: 2002

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Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

		All estab- lish- ments ³	All employees		Production workers				Total	Total	Total capital
Industry and year ¹	Com- panies ²		Number ⁴	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	cost of materials (\$1,000)		expendi- tures (\$1,000)
336311, Carburetor, piston, piston ring, and valve manufacturing	113 N N N N 122	N	11 982 14 135 17 748 17 341 17 706 17 241	475 663 519 826 770 909 735 552 709 099 663 961	9 386 11 051 14 935 14 268 14 579 14 285	20 480 21 285 31 670 30 735 30 761 29 836	334 561 357 293 587 409 567 225 536 278 504 719	1 346 042 1 263 557 1 853 315 1 757 693 1 676 075 1 587 949	658 468 774 466 1 460 724 1 336 803 1 225 645 1 138 820	2 001 694 2 050 589 3 279 214 3 108 445 2 913 458 2 731 573	¹ 97 657 109 053 114 055 197 270 199 256 180 295

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

		All establishments ²		All employees		Production workers						
Industry and geographic area	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
336311, Carburetor, piston, piston ring, and valve manufacturing												
United States. California Michigan Nevada Ohio Texas	2	132 26 10 4 7	57 10 5 3 2	11 982 935 1 259 279 508 216	475 663 27 849 53 181 8 219 22 144 6 435	9 386 738 865 205 390 174	20 480 1 458 1 716 462 768 341	334 561 17 095 30 104 5 099 12 815 4 540	1 346 042 63 685 145 382 25 231 53 499 12 948	658 468 30 288 65 637 11 364 18 866 7 077	2 001 694 94 264 209 799 36 478 71 791 19 522	r97 657 r11 263 r4 631 r190 r2 315 r375

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

ltem	Value
336311, Carburetor, piston, piston ring, and valve manufacturing	
Companies ¹ number.	113
All establishments ²	132 75 33 24
All employees3 number. Total compensation \$1,000. Annual payroll \$1,000. Total fringe benefits \$1,000.	11 982 632 746 475 663 157 083
Production workers, average for year	9 386 9 347 9 556 9 478 9 141
Production worker hours	20 480 334 561
Total cost of materials \$1,000. Materials, parts, containers, packaging, etc., used \$1,000. Resales \$1,000. Purchased fuels \$1,000. Purchased electricity \$1,000. Contract work \$1,000.	658 468 526 058 85 873 6 706 26 826 13 005
Quantity of electricity purchased for heat and power	575 694 -
Total value of shipments \$1,000. Primary products value of shipments \$1,000. Secondary products value of shipments \$1,000. Total miscellaneous receipts \$1,000. Value of resales \$1,000. Contract receipts \$1,000. Other miscellaneous receipts \$1,000.	2 001 694 1 773 605 82 952 145 137 136 565 D
Primary products specialization ratio percent. Value of primary products shipments made in all industries \$1,000. Value of primary products shipments made in this industry \$1,000. Value of primary products shipments made in other industries \$1,000.	96 2 238 225 1 773 605 464 620
Coverage ratiopercent	79
Value added\$1,000	1 346 042
Total inventories, beginning of year \$1,000. Finished goods inventories \$1,000. Work-in-process inventories \$1,000. Materials and supplies inventories \$1,000.	188 885 90 450 31 994 66 441
Total inventories, end of year \$1,000. Finished goods inventories \$1,000. Work-in-process inventories \$1,000. Materials and supplies inventories \$1,000.	193 512 90 003 35 257 68 252
Gross value of depreciable assets (acquisition costs) at beginning of year \$1,000 Total capital expenditures (new and used) \$1,000 Buildings and other structures (new and used) \$1,000 Machinery and equipment (new and used) \$1,000 Automobiles, trucks, etc., for highway use \$1,000 Computers and peripheral data processing equipment \$1,000 All other expenditures for machinery and equipment \$1,000 Total retirements \$1,000 Gross value of depreciable assets at end of year \$1,000	'1 152 443 '97 657 '14 715 '82 942 '790 '1 702 '80 450 '53 642 '1 196 458
Depreciation charges during year\$1,000	r58 609
Total rental payments \$1,000 Buildings and other structures \$1,000 Machinery and equipment \$1,000	12 268 5 758 6 510
Total other expenses ⁴ \$1,000. Response coverage ratio ⁵ percent. Repair and maintenance services of buildings and/or machinery ⁴ \$1,000. Communications services ⁴ \$1,000. Legal services ⁴ \$1,000. Accounting, auditing, and bookkeeping services ⁴ \$1,000. Advertising and promotional services ⁴ \$1,000. Expensed computer hardware and supplies and purchased computer services ⁴ \$1,000. Refuse removal (including hazardous waste) services ⁴ \$1,000. Management consulting and administrative services ⁴ \$1,000. Taxes and license fees ⁴ \$1,000. All other expenses ⁴ \$1,000.	195 475 89 26 279 3 707 7 072 1 748 15 330 1 663 3 384 5 313 11 274 119 706

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.
2Includes establishments with payroll at any time during the year.
3Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.
4Based on 2002 Annual Survey of Manufactures (ASM) sample data.
5A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class			All emp	oloyees	Pr	oduction worke	ers		Total	Total	Total
		All estab- lish- ments ²	Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	cost of materials (\$1,000)	value of shipments (\$1,000)	capital expendi- tures (\$1,000)
336311, Carburetor, piston, piston ring, and valve manufacturing											
All establishments Establishments with — 1 to 4 employees 5 to 9 employees 10 to 19 employees 20 to 49 employees 10 to 249 employees 10 to 249 employees 250 to 499 employees 500 to 999 employees 1,000 to 2,499 employees 2,500 employees or more	9 8 5 3 2	132 33 25 17 17 16 10 7 6	11 982 66 162 223 569 1 041 1 745 2 563 h	475 663 2 146 5 564 8 038 21 622 34 547 64 165 106 458 D	9 386 52 141 174 428 751 1 269 1 875 D	20 480 98 274 364 859 1 507 2 881 3 965 D	334 561 1 619 4 515 5 439 13 557 20 816 40 097 67 793 D	1 346 042 4 910 13 352 19 809 50 113 75 721 258 155 232 271 D	658 468 3 177 10 804 10 190 32 315 42 049 62 416 98 562 D	2 001 694 8 080 24 407 29 549 82 085 118 235 325 495 329 805 D	'97 657 '225 '733 '2 149 '3 879 '3 171 '18 655 9 800 D
Administrative records ⁴	9	55	404	14 731	345	693	11 806	33 972	22 711	56 676	^r 1 999

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

¹Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or		All	All em	ployees	Pr	oduction work	ers		Total	Total	Total capital
product class code	Industry or primary product class	estab- lish- ments ¹	Number ²	Payroll (\$1,000)	Number ²	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	cost of materials (\$1,000)	value of shipments (\$1,000)	expendi-
336311	Carburetor, piston, piston ring, and valve manufacturing	132	11 982	475 663	9 386	20 480	334 561	1 346 042	658 468	2 001 694	'97 657
3363111 3363113	Carburetors, new and rebuilt (all types)	9	1 015	29 032	583	1 390	10 487	150 032	15 503	172 829	r3 022
3363115	(engine)	40 10	8 119 2 121	331 866 89 076	6 676 1 516	14 687 3 221	249 205 54 965	817 319 321 059	493 312 112 322	1 302 419 431 628	¹ 79 059 13 012

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

¹Includes establishments with payroll at any time during the year.

²Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Table 6a. Products Statistics: 2002 and 1997

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

		Number of companies with		Product shipments		
Product code	Product	shipments of \$100,000 or more	Quantity of production for all purposes	Quantity	Value (\$1,000)	
336311	Carburetor, piston, piston ring, and valve manufacturing	N N	×	×	2 238 225 2 426 407	
3363111	Carburetors, new and rebuilt (all types)	N N	X	X X	415 523 935 569	
33631111	Carburetors, new and rebuilt, except parts	N N	x x	X X	935 369 D D	
3363111101	Carburetors for motor vehicle engines (passenger car, truck, and bus), new, all types	4	x	х	D	
3363111103	All other carburetors, new, all types	6 3	X	X	556 687 D	
3363111105	1997 Carburetors, rebuilt, all types	7 8	X X X	X	49 471	
33631112	Parts for carburetors (excluding gaskets and screw machine products)	13 N	x	X X	92 779 D	
3363111207	Parts for carburetors (excluding gaskets and screw machine products)	N 4	X X	X X	D D	
3363111Y	Carburetors, new and rebuilt (all types), nsk	6 N	X X	X	D 16 251	
3363111YWV	1997	N N N	X X X	X X X	16 251 —	
3363113	Pistons, piston rings, and piston pins (engine)	N	x	x	1 317 260	
33631131	1997 Pistons, all types	N N	X X X X	X	1 029 243 762 749	
3363113101	Pistons for motor vehicle engines (passenger car, truck, and bus), all types (machined), except rough castings	N 16		X X	633 278 691 471	
3363113103	All other engine pistons, all types (machined), except rough castings	14	X X X	X	500 780 71 278	
33631132	1997 Piston rings, all types	20 N	XX	X	132 498 D	
3363113205	Oil type piston rings for motor vehicle engines (passenger car, truck, and bus), all types	N 8	X X	X X	D 252 648	
3363113207	All other oil type engine piston rings	5 6	XX	X	34 549 D	
3363113209	Compression type piston rings for motor vehicle engines (passenger car, truck, and bus), all types	7 6	x x	X X	13 237 32 20 <u>2</u>	
3363113211	All other compression type engine piston rings	4 14	XX	X	D 63 127	
33631133	1997	14 N	X X	X X X	95 904 D	
3363113313	1997	N 3	X X	X	D	
3363113Y	Pistons, piston rings, and piston pins (engine), nsk	5 N	X	X	D 33 892	
3363113YWV	Pistons, piston rings, and piston pins (engine), nsk	N N N	x x x x x x x x	X X X	26 952 33 892 26 952	
3363115	Valves (engine intake and exhaust)2002	N	x	X	426 144	
33631151	1997 Intake and exhaust valves for all engines	N N	X X X X	X	418 319 422 043	
3363115101	Intake and exhaust valves for motor vehicle engines (passenger car, truck, and bus)	N 7	x	X X	418 319 D	
3363115103	Intake and exhaust valves for other engines	10 12	X X X X	X	259 454 D	
3363115Y	1997 Valves (engine intake and exhaust), nsk	13 N	X	X	158 865 4 101	
3363115YWV	1997	N N N	X X X	X X X	4 101	
336311W	Carburetor, piston, piston ring, and valve manufacturing, nsk, total	N	×	×	79 298	
336311WY	Carburetor, piston, piston ring, and valve manufacturing, nsk, total	N N	x x	X X	43 276 79 298	
336311WYWW	Carburetor, piston, piston ring, and valve manufacturing, nsk, for nonadministrative-record establishments	N N	x x	X X	43 276 27 129	
336311WYWY	Carburator, niston, niston ring, and valve manufacturing	N N	x	x	7 102	
	nsk, for administrative-record establishments	N N	X	X X	52 169 36 174	

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. Product Class Shipments for Selected States: 2002 and 1997

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
3363111	Carburetors, new and rebuilt (all types) United States. 2002. 1997. California 2002. 1997.	415 523 935 569 14 450 30 929
3363113	Pistons, piston rings, and piston pins (engine) United States. 2002. 1997. California 2002. Michigan. 1997. Ohio 2002. Texas 2002.	1 317 260 1 029 243 49 695 22 025 128 593 83 375 63 611 42 433 9 763
3363115	Valves (engine intake and exhaust) United States	14 756 14 756 426 144 418 319

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
336311	Carburetor, piston, piston ring, and valve manufacturing		
00900001	Total materials	X	526 058
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	1 012 271 1 399
33200095	Other fabricated metal products (excluding castings and forgings)	X X	51 501 3 678 31 984
33151001	Iron and steel castings (rough and semifinished)	X	128 040
33152005	1997	X X X	77 362 194 284 243 996
33152003	Other nonferrous metal castings, rough and semifinished (including aluminum and aluminum-	X	243 996 D
	base alloy)	â	D
33120007	Steel bars, bar shapes, and plate (excluding castings, forgings, and fabricated metal products)	X	26 980
33120085	All other steel shapes and forms (excluding castings, forgings, and fabricated metal products)	X	53 011 D
33100038	Aluminum and aluminum-base alloy shapes and forms (excluding castings, forgings, and	X	120 061
	fabricated metal products)	X	4 490 N
33100077	Other nonferrous shapes and forms (excluding castings, forgings, and fabricated metal		
	products)	X X	D D
32221001	Paperboard containers, boxes, and corrugated paperboard	X	2 610 7 938
00190003	Flexible packaging materials	X	914 389
33999103	Gaskets (all types), and packing and sealing devices	X	1 350
00970099	All other materials and components, parts, containers, and supplies	X	9 156 79 415
00971000	Materials, ingredients, containers, and supplies, nsk	X X X	289 578 27 369 50 522

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.